

Claim Amendments:

Please amend claims 1-15, 17-19 and 21-23 and add new claims 25-29 as follows:

Claim 1 (currently amended): In ~~an~~ a bipolar air ionizer apparatus comprising an air inlet, a high voltage source, ~~an~~ a first electrode electrically connected to the high voltage source ~~for generating~~ and configured to generate positive polarity ions, a second electrode electrically connected to the high voltage source and configured to generate negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer through the air inlet, around the ~~electrode~~ electrodes and out of the bipolar air ionizer through the air outlet, wherein the improvement comprises:

A/ a foraminous filter comprising an electrically conductive material, the filter being electrically coupled to at least one of a voltage source and ground, the filter being positioned over at least one of the air inlet, the air outlet and the ~~electrode~~ electrodes, such that air flowing into the air inlet, air flowing out of the air outlet ~~of~~ or air flowing past the ~~electrode~~ electrodes flows through the filter.

Claim 2 (currently amended): The bipolar air ionizer as recited in claim 1, wherein the filter is positioned over the air inlet and is electrically coupled to ground for removing positive and negative ions from the air flowing into the bipolar air ionizer.

Claim 3 (currently amended): The bipolar air ionizer as recited in claim 2, wherein the filter comprises a metal screen.

Claim 4 (currently amended): The bipolar air ionizer as recited in claim 1, wherein the filter is positioned over the air inlet and is electrically coupled to a voltage source for preventing existing voltage offsets in the air of the surrounding environment from flowing into the bipolar air ionizer.

Claim 5 (currently amended): The bipolar air ionizer as recited in claim 4, wherein the voltage source which is electrically coupled to the filter comprises one of a direct current voltage and a control loop voltage.

Claim 6 (currently amended): The bipolar air ionizer as recited in claim 4, wherein the filter is comprised of a metal screen.

AI
cont
Claim 7 (currently amended): The bipolar air ionizer as recited in claim 1, wherein the filter is positioned over the air outlet and is electrically coupled to ground for removing unwanted positive and negative ions and ionization noise from ionized air flowing out of the bipolar air ionizer through the air outlet.

Claim 8 (currently amended): The bipolar air ionizer as recited in claim 7, wherein the filter comprises a metal screen.

Claim 9 (currently amended): The bipolar air ionizer apparatus as recited in claim 1, wherein the high voltage source comprises a high voltage direct current power supply and wherein the filter is positioned over the air outlet and is coupled to a direct current voltage source for reducing noise ions from the ionized air flowing out of the bipolar air ionizer through the air outlet and for controlling the direct current balance of the ionized air flowing out of the bipolar air ionizer.

Claim 10 (currently amended): The bipolar air ionizer as recited in claim 9, wherein the filter comprises a metal screen.

Claim 11 (currently amended): The bipolar air ionizer as recited in claim 9, further comprising a sensor at the air outlet for sensing ion content of the outlet air, the sensor providing a feedback voltage for controlling the output of the high voltage direct current power supply.

Claim 12 (currently amended): The bipolar air ionizer as recited in claim 9, further comprising a sensor at the air outlet for sensing ion content of the outlet air, the

sensor providing a feedback voltage for controlling the direct current voltage source coupled to the filter.

AI
conf

Claim 13 (currently amended): The bipolar air ionizer as recited in claim 1, ~~wherein the high voltage source comprises a high voltage alternating current power supply~~ and 25, wherein the filter is positioned over the air outlet and is coupled to a direct current voltage source for reducing noise ions from the ionized air flowing out of the bipolar air ionizer and for controlling the direct current balance of the ionized air flowing out of the bipolar air ionizer.

Claim 14 (currently amended): The bipolar air ionizer as recited in claim 13, wherein the filter comprises a metal screen.

Claim 15 (currently amended): A method of removing ions from air flowing into ~~an~~ a bipolar air ionizer having an air inlet, a high voltage source, ~~an~~ a first electrode electrically connected to the high voltage source ~~for generating and configured to generate positive polarity ions~~, a second electrode electrically connected to the high voltage source and configured to generate negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer through the air inlet, around the ~~electrode~~ electrodes and out of the bipolar air ionizer through the air outlet, the method comprising the steps of:

placing a foraminous filter comprising an electrically conductive material over the air inlet; and

coupling the filter to one of a voltage source and ground.

Claim 16 (original): The method as recited in claim 15, wherein the filter comprises a metal screen.

Claim 17 (currently amended): A method for removing unwanted ions and ionization noise from ionized air flowing out of ~~an~~ a bipolar air ionizer, the bipolar air ionizer having an air inlet, a high voltage source, ~~an~~ a first electrode electrically connected to the high voltage source ~~for generating and configured to generate positive polarity ions~~, a second

electrode electrically connected to the high voltage source and configured to generate negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer through the air inlet, around the ~~electrode~~ electrodes and out of the bipolar air ionizer through the air outlet, the method comprising the steps of:

placing a foraminous filter comprising an electrically conductive material over the air outlet; and

coupling the filter to one of a voltage source and ground.

Claim 18 (currently amended): The method as recited in claim ~~16~~ 17 wherein the filter comprises a metal screen.

Claim 19 (currently amended): A method of removing ions from air flowing into ~~an~~ a bipolar air ionizer having an air inlet, a high voltage source, ~~an~~ a first electrode electrically connected to the high voltage source ~~for generating and configured to generate positive polarity ions~~, a second electrode electrically connected to the high voltage source and configured to generate negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer through the air inlet, around the ~~electrode~~ electrodes and out of the bipolar air ionizer through the air outlet, the method comprising the steps of:

placing a foraminous filter comprising an electrically conductive material around the ~~electrode~~ electrodes; and

coupling the filter to one of a voltage source and ground.

Claim 20 (original): The method as recited in claim 19, wherein the filter comprises a metal screen.

Claim 21 (currently amended): In ~~an~~ a bipolar air ionizer apparatus comprising an air inlet, a high voltage source, ~~an~~ a first electrode electrically connected to the high voltage source ~~for generating and configured to generate positive polarity ions~~, a second electrode electrically connected to the high voltage source and configured to generate negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer

through the air inlet, around the ~~electrode~~ electrodes and out of the bipolar air ionizer through the air outlet, wherein the improvement comprises:

a foraminous filter comprising an electrically conductive material, the filter being electrically coupled to one of a voltage source and ground, the filter being positioned on an interior surface of the bipolar air ionizer apparatus, such that at least a portion of the air flowing ~~pass~~ past the ~~electrode~~ electrodes engages the filter.

Claim 22 (currently amended): The bipolar air ionizer apparatus as recited in claim 21 wherein the filter comprises a metal screen.

Claim 23 (currently amended): A method of removing unwanted ions from air flowing out of ~~an~~ a bipolar air ionizer, the bipolar air ionizer having an air inlet, a high voltage source, ~~an~~ a first electrode electrically connected to the high voltage source ~~for generating~~ and configured to generate positive polarity ions, a second electrode electrically connected to the high voltage source and configured to generate negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer through the air inlet, around the ~~electrode~~ electrodes and out of the bipolar air ionizer through the air outlet, the method comprising the steps of:

placing a foraminous filter comprising an electrically conductive material over an interior surface of the bipolar air ionizer apparatus proximate to the ~~electrode~~ electrodes; and

coupling the filter to one of a voltage source and ground.

Claim 24 (original): The method as recited in claim 23 wherein the filter comprises a metal screen.

Claim 25 (New): In a bipolar air ionizer apparatus comprising an air inlet, a high voltage source having a high voltage alternating current power supply, an electrode electrically connected to the high voltage alternating current power supply and configured to alternately generate positive polarity ions and negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer through the air inlet, around the

electrode and out of the bipolar air ionizer through the air outlet, wherein the improvement comprises:

a foraminous filter comprising an electrically conductive material, the filter being electrically coupled to at least one of a voltage source and ground, the filter being positioned over at least one of the air inlet, the air outlet and the electrode, such that air flowing into the air inlet, air flowing out of the air outlet or air flowing past the electrode flows through the filter.

112
conf

Claim 26 (new): A method of removing ions from air flowing into a bipolar air ionizer having an air inlet a high voltage source having a high voltage alternating current power supply, an electrode electrically connected to the high voltage alternating current power supply and configured to alternately generate positive polarity ions and negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer through the air inlet, around the electrode and out of the bipolar air ionizer through the air outlet, the method comprising the steps of:

placing a foraminous filter comprising an electrically conductive material over the air inlet; and

coupling the filter to one of a voltage source and ground.

Claim 27 (new): A method of removing ions from air flowing into a bipolar air ionizer having an air inlet, a high voltage source having a high voltage alternating current power supply, an electrode electrically connected to the high voltage alternating current power supply and configured to alternately generate positive polarity ions and negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer through the air inlet, around the electrode and out of the bipolar air ionizer through the air outlet, the method comprising the steps of:

placing a foraminous filter comprising an electrically conductive material around the electrode; and

coupling the filter to one of a voltage source and ground.

Claim 28 (new): In a bipolar air ionizer apparatus comprising an air inlet, a high voltage source having a high voltage alternating current power supply, an electrode

electrically connected to the high voltage alternating current power supply and configured to alternately generate positive polarity ions and negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer through the air inlet, around the electrode and out of the bipolar air ionizer through the air outlet, wherein the improvement comprises:

a foraminous filter comprising an electrically conductive material, the filter being electrically coupled to one of a voltage source and ground, the filter being positioned on an interior surface of the bipolar air ionizer apparatus, such that at least a portion of the air flowing past the electrodes engages the filter.

Claim 29 (new): A method of removing unwanted ions from air flowing out of a bipolar air ionizer, the bipolar air ionizer having an air inlet, a high voltage source having a high voltage alternating current power supply, an electrode electrically connected to the high voltage alternating current power supply and configured to alternately generate positive polarity ions and negative polarity ions, an air outlet and an air mover for causing air to flow into the bipolar air ionizer through the air inlet, around the electrode and out of the bipolar air ionizer through the air outlet, the method comprising the steps of:

placing a foraminous filter comprising an electrically conductive material over an interior surface of the bipolar air ionizer apparatus proximate to the electrode; and coupling the filter to one of a voltage source and ground.
